

WHAT IS CLAIMED IS:

1. An image pickup system including a plurality of image pickup apparatuses connected to a predetermined communication medium, wherein

5 one of said plurality of image pickup apparatuses comprises synchronization information generating means for generating synchronization information for synchronizing said plurality of image pickup apparatuses and transmitting means for
10 transmitting said synchronization information to said plurality of image pickup apparatuses, and

 each of said plurality of image pickup apparatuses comprises receiving means for receiving said synchronization information, frame
15 synchronization signal generating means for generating a frame synchronization signal on the basis of said synchronization information, and image data generating means for generating image data on the basis of said frame synchronization signal.

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 2. A system according to claim 1, wherein said frame synchronization signal generating means generates said frame synchronization signal by using time information for managing a predetermined
25 communication cycle and said synchronization information.

3. A system according to claim 1, further comprising a control device connected to said predetermined communication medium, and wherein said control device selects the image pickup apparatus for
5 generating said synchronization information.

4. A system according to claim 3, wherein said control device transmits control information including a communication address corresponding to
10 the image pickup apparatus for generating said synchronization information to said plurality of image pickup apparatuses.

5. A system according to claim 1, wherein said
15 predetermined communication medium conforms with the IEEE1394-1995 standard or its extended standard.

6. An image pickup apparatus comprising:
synchronization information generating means
20 for generating synchronization information for synchronizing a plurality of image pickup apparatuses connected to a predetermined communication medium;
transmitting means for transmitting said synchronization information to said plurality of
25 image pickup apparatuses;
frame synchronization signal generating means for generating a frame synchronization signal on the

basis of said synchronization information; and
image data generating means for generating
image data on the basis of said frame synchronization
signal.

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7. An apparatus according to claim 6, wherein
said frame synchronization signal generating means
generates said frame synchronization signal by using
time information for managing a predetermined
10 communication cycle and said synchronization
information.

8. An apparatus according to claim 6, wherein
said predetermined communication medium conforms with
15 the IEEE1394-1995 standard or its extended standard.

9. An image pickup apparatus comprising:
receiving means for receiving synchronization
information for synchronizing a plurality of image
20 pickup apparatuses connected to a predetermined
communication medium from one of said plurality of
image pickup apparatuses;

frame synchronization signal generating means
for generating a frame synchronization signal on the
25 basis of said synchronization information; and
image data generating means for generating
image data on the basis of said frame synchronization

signal.

10. An apparatus according to claim 9, wherein
said frame synchronization signal generating means
5 generates said frame synchronization signal by using
time information for managing a predetermined
communication cycle and said synchronization
information.

10 11. An apparatus according to claim 9, wherein
said predetermined communication medium conforms with
the IEEE1394-1995 standard or its extended standard.

12. A method of controlling an image pickup
15 apparatus, comprising the steps of:
generating synchronization information for
synchronizing a plurality of image pickup apparatuses
connected to a predetermined communication medium;
transmitting said synchronization information
20 to said plurality of image pickup apparatuses;
generating a frame synchronization signal on
the basis of said synchronization information; and
generating image data on the basis of said
frame synchronization signal.

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13. A method according to claim 12, wherein
said frame synchronization signal is generated by

using time information for managing a predetermined communication cycle and said synchronization information.

- 5 14. A method according to claim 12, wherein said predetermined communication medium conforms with the IEEE1394-1995 standard or its extended standard.

- 10 15. A method of controlling an image pickup apparatus, comprising the steps of:
 receiving synchronization information for synchronizing a plurality of image pickup apparatuses connected to a predetermined communication medium from one of said plurality of image pickup
15 apparatuses;

 generating a frame synchronization signal on the basis of said synchronization information; and
 generating image data on the basis of said frame synchronization signal.

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16. A method according to claim 15, wherein said frame synchronization signal is generated by using time information for managing a predetermined communication cycle and said synchronization
25 information.

17. A method according to claim 15, wherein

said predetermined communication medium conforms with the IEEE1394-1995 standard or its extended standard.

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